



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/763,573	01/22/2004	Neil J. Goldfine	1884.2021-001	4895

21005 7590 11/28/2006

HAMILTON, BROOK, SMITH & REYNOLDS, P.C.
530 VIRGINIA ROAD
P.O. BOX 9133
CONCORD, MA 01742-9133

EXAMINER

CHERRY, STEPHEN J

ART UNIT	PAPER NUMBER
----------	--------------

2863

DATE MAILED: 11/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/763,573

Applicant(s)

GOLDFINE ET AL.

Examiner

Stephen J. Cherry

Art Unit

2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 and 37-46 is/are pending in the application.
- 4a) Of the above claim(s) 1-26 and 45 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 37-44 and 46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of claim 44, detection of property of conductivity, in the reply filed on 9-18-2006 is acknowledged. Therefore, claim 45, drawn to the non-elected species is withdrawn from further consideration.

Claim Objections

Claim 43 is objected to because of the following informalities: "the shot peening" lacks antecedent basis in the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 37-42, 44, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 3,718,855 to Rogel, in view of U.S. Patent Application Publication 2002/0066770 to James et al.

With regard to the claim, Rogel discloses a method for health control of an article comprising: examining material condition of an article with an eddy current sensor ('855, col. 3, line 37); determining presence of an early stage damage, based on a variation of

Art Unit: 2863

an absolute electrical property ('855, col. 3, line 46); establishing a baseline condition for an absolute electrical property; and with the eddy current sensor, performing future inspections that use this baseline condition for comparison to make decisions based on article health ('855, col. 2, line 28, "comparison of inspection data"); wherein the eddy current sensor is a sensor array ('855, fit. 1, ref. 10); wherein the sensor is mounted to a surface of the article ('855, col. 3, line 8); wherein the sensor is scanned over a surface of the article ('855, col. 4, line 24); wherein the electrical property is electrical conductivity ('855, fig. 1, measurement in microamperes reflects conductivity).

However, James does not disclose methods or repairing damage.

With further regard to the claim, James teaches performing a health control action on the article if early stage damage is present ('770, fig. 2, repair, shown in block 50 integrated into inspection procedure, shown in blocks 32-38), integrating the health control action with scheduling of inspections (770, fig. 2, blocks, 38 and 50); wherein the health control action is blending out of early stage damage to extend life ('770, fig. 2, block 50); wherein the health control action effectively returns the article to original material condition ('770, fig. 2, block 50, deposition of material returns part to effectively original condition because discontinuity is eliminated).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the crack repair methods of James with the crack detection methods of Rogel to prevent catastrophic failure of parts (see '770, par. 5).

Art Unit: 2863

Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 3,718,855 to Rogel, in view of U.S. Patent Application Publication 2002/0066770 to James et al as applied to claims 37 and 42 above, and further in view of U.S. Patent 6,670,577 to Staver et al.

The claim further recites, as disclosed by Staver, wherein the shot peening is performed after blending out ('577, col. 1, line 15).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the crack repair methods of James with the crack detection methods of Rogel to prevent catastrophic failure of parts (see '770, par. 5), and to further combine with the shot peening of Staver to stop further crack propagation ('577, col. 1, line 25).

Response to Arguments

Applicant's arguments filed 6-12-2006 regarding new claims have been fully considered but they are not persuasive. Because the claims are new, a new rejection has been applied. However, applicant argues that James in combination with Rogel does not teach after action is complete, establishing a baseline condition. However, this language is not necessarily limiting in the claim because the phrases are dependent upon "if" conditions which may not be present.

Conclusion

Art Unit: 2863

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

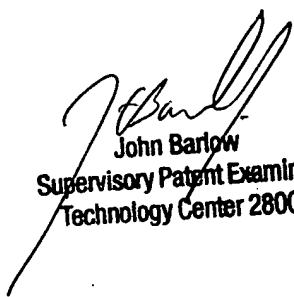
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen J. Cherry whose telephone number is (571) 272-2272. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571) 272-2269. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2863

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SJC



John Barlow
Supervisory Patent Examiner
Technology Center 2800